ABSTRACT OF THE DISCLOSURE

The invention discloses a A device for hybridization reaction between a target molecule in a fluid and a probe, which comprises includes a microfluidic channel having comprising a first portion and a second portion following said the first portion; wherein said the first portion have has an irregular cross section and said the second portion has a probe, and a fluid driving element connected to the ends of said the channel with tubes, wherein said the fluid element can move said the target molecules back-and-forth for repeatedly passing through said the second portion.